Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

1. (Previously Presented) An endodontic instrument, comprising:

   a shaft that includes an end, a tip, one or more flutes, and a longitudinal axis, wherein at least one flute includes a cutting edge that is the leading edge of the flute when the instrument is rotated in a first direction of rotation about the longitudinal axis so that the instrument is configured to cut, without requiring force to be applied to the instrument in an end-to-tip longitudinal direction, when the shaft is rotated in ~~a~~ the first direction of rotation about the longitudinal axis, and wherein the at least one flute spirals around the shaft in the end-to-tip longitudinal direction and in a second direction of rotation that is opposite from the first direction of rotation.

2. (Original) The instrument of claim 1, further comprising:

   at least one helix that includes one or more cross cuts.

3. (Original) The instrument of claim 1, wherein:

   the shaft includes a portion where the cutting edge is rolled.

4. (Original) The instrument of claim 1, wherein:

   the one or more flutes have S-shaped splines.

5. (Original) The instrument of claim 4, wherein:

   the tip is a non-cutting tip.

6. (Original) The instrument of claim 4, wherein:

   the tip is a cutting tip.

7. (Original) The instrument of claim 1, wherein:

the cutting edge of the flute has a zero cutting angle.

8. (Original) The instrument of claim 7, wherein:

a cross section of the shaft has a quadrilateral-like shape.

9. (Original) The instrument of claim 7, wherein:

a cross section of the shaft has a triangle-like shape.

10. (Original) The instrument of claim 1, wherein:

the shaft is fabricated from one of Ni-Ti and Ni-Ti alloy.

11. (Original) The instrument of claim 1, further comprising:

an attachment for coupling the shank end of the instrument to an engine operable to rotate the instrument.

12. (Original) The instrument of claim 1, wherein:

the cutting edge is a right handed cutting edge.

13. (Original) The instrument of claim 1, wherein:

the cutting edge is a left handed cutting edge.

14. (Currently Amended) The instrument of claim 1, wherein:

the instrument is ~~if~~ a hand-type endodontic instrument.

15. (Original) The instrument of claim 1, wherein:

the instrument is a rotary-type endodontic instrument.

16. (Original) The instrument of claim 1, wherein:

the one or more flutes taper in a shank-to-tip direction.

17. (Original) The instrument of claim 1, wherein:

at least one flute has no radial lands.

18. (Original) The instrument of claim 1, wherein:

at least one flute has reduced radial lands.

19. (Previously Presented) An endodontic instrument, comprising:

a shaft that includes an end, a tip, one or more flutes, and a longitudinal axis, wherein at least one flute includes a cutting edge that is the leading edge of the flute when the instrument is rotated in a first direction of rotation about the longitudinal axis so that the instrument is configured to cut, without requiring the instrument to be threaded into a material to be cut, when the shaft is rotated in the first direction of rotation about the longitudinal axis, and wherein the at least one flute is situated to wrap around the shaft in an end-to-tip longitudinal direction and in a second direction of rotation that is opposite from the first direction of rotation.

20. (Previously Presented) An endodontic instrument, comprising:

a shaft that includes an end, a tip, one or more flutes, and a longitudinal axis, wherein the instrument is a rotary type instrument and at least one flute includes a cutting edge that is the leading edge of the flute when the instrument is rotated in a first direction of rotation about the longitudinal axis so that the instrument is configured to cut when the shaft is rotated in the first direction of rotation about the longitudinal axis, wherein the instrument is not required to be rotated in a reciprocating manner in order to cut, and wherein the at least one flute is situated to wrap around the shaft in an end-to-tip longitudinal direction and in a second direction of rotation that is opposite from the first direction of rotation.